IN THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method for producing CT images of a partially cyclically moving examination object, ~~preferably of a patient (P), in which~~comprising:

~~1.1.~~ scanning ~~in one pass~~ the examination object in one pass ~~is scanned~~ by a spiral movement of at least one focus ~~(1)~~ and at least one detector oppositely ~~(2)~~ situated; ~~opposite,~~

~~1.2.~~ performing the scanning of the examination region ~~is performed~~ at a relative feed rate ~~(v_t)~~ between gantry ~~(1, 2)~~ and couch ~~(L), and~~;

~~1.3.~~ determining a three-dimensional image of ~~the~~ absorption coefficients ~~is determined~~ with the aid of a multiplicity of sectional planes of an examination volume on the basis of the data obtained by scanning~~,~~ ;

determining ~~characterized in that~~

~~1.4.~~ at least one static object area and at least one at least partially moving object area ~~are determined~~ with reference to the examination object ~~(P)~~ with the aid of cyclical intrinsic movement~~,~~ ; and

~~1.5.~~ using, during a pass when scanning the examination object, ~~(P)~~ a first feed rate ~~(v_1) is used~~ in the at least one moving object area, and using another, second feed rate ~~(v_2) is used~~ in the at least one static object area.

2. (Currently Amended) The method as claimed in ~~the preceding~~ claim 1, ~~characterized in that~~wherein a relatively

higher feed rate ~~(v_2)~~ serves for scanning the static object area, and a relatively lower feed rate ~~(v_1)~~ serves for scanning the moving object area.

3. (Currently Amended) The method as claimed in ~~the preceding~~ claim 2, ~~characterized in that~~wherein the position of the beating heart ~~(H)~~ is determined in order to divide the examination object ~~(P)~~ into static and moving object areas.

4. (Currently Amended) The method as claimed in ~~the preceding~~ claim 3, ~~characterized in that~~wherein the determination of static and moving object areas before the scan is performed by ~~means of~~ at least one topogram recording ~~(T)~~.

5. (Currently Amended) The method as claimed in ~~the preceding~~ claim 3, ~~characterized in that~~wherein the determination of static and moving object areas before the scan is performed by ~~means of~~ at least one optical recording, preferably with subsequent manual subdivision of the areas.

6. (Currently Amended) The method as claimed in ~~one of the preceding~~ claim~~s~~ 1 ~~to 5~~, ~~characterized in that~~wherein the transition between the feed rates is performed with a prescribed maximum acceleration.

7. (Currently Amended) The method as claimed in ~~the preceding~~ claim 1, ~~characterized in that~~wherein the determination of moving and static object areas is performed during the scan, and a relatively low feed rate ~~(v_1)~~ is selected upon detection of a cyclical movement, and a relatively higher feed rate ~~(v_2)~~ is selected upon detection of a static state.

8. (Currently Amended) The method as claimed in ~~one of the preceding~~ claim~~s~~ ~~1 to 7~~, ~~characterized in that~~wherein the detection of the cyclical movement of the subarea of the examination object ~~(P)~~ is performed in the current scanning area by virtue of the fact that the intensity measurement of at least one pair of rays on a common ray axis~~, preferably of two oppositely directed rays,~~ is compared to two consecutive instants.

9. (Currently Amended) The method as claimed in ~~one of the preceding~~ claim~~s~~ ~~1 to 8~~, ~~characterized in that~~wherein during scanning at a relatively low feed rate, ~~(v_t)~~ the movement of the heart ~~(H)~~ is temporally resolved by ~~means~~ way of ECG leads and is divided into movement phases ~~(B)~~ and rest phases ~~(R)~~, with only detected data from the rest phase ~~(R)~~ being used to compile images.

10. (Currently Amended) The method as claimed in ~~one of the preceding~~ claim~~s~~ ~~1 to 9~~, ~~characterized in that~~wherein use is made when scanning the moving area of a CT spiral reconstruction method that uses only detector data from a specific cycle rest phase of the cyclically moving area, whereas during scanning of the static area use is made of a spiral reconstruction method that uses all the measured detector data for the reconstruction.

11. (Currently Amended) The method as claimed in ~~one of the preceding~~ claim~~s~~ ~~1 to 10~~, ~~characterized in that~~wherein the intensity of radiation emanating from the at least one focus is matched to the respectively current feed rate ~~(v_t)~~.

12. (Currently Amended) The method as claimed in ~~the preceding~~ claim 11, ~~characterized in that~~wherein the intensity of radiation is matched by at least one of controlling and~~/~~ regulating a tube current.

13. (Currently Amended) A CT unit for scanning an at least partially cyclically moving examination object, ~~preferably a patient, having~~ comprising:

~~a beam emanating from~~ at least one focus from which a beam is eminated ~~(1),~~; and

~~having~~ at least one detector ~~(2)~~ of planar design, including ~~and with~~ a multiplicity of distributed detector elements for detecting the rays of the beam ~~(3)~~, the at least one focus ~~(1)~~ being ~~moved~~ movable relative to the examination object ~~(P)~~ with a feed rate ~~(v_t)~~ on a spiral focal track ~~(S)~~ revolving about the examination object~~,~~ ~~characterized in that at least means for carrying out the method in accordance with one of the preceding method claims are included~~; and

means for determining a three-dimensional image of absorption coefficients with the aid of a multiplicity of sectional planes of an examination volume on the basis of the data obtained by scanning, for determining at least one static object area and at least one at least partially moving object area with reference to the examination object with the aid of cyclical intrinsic movement, and for using, during a pass when scanning the examination object, a first feed rate in the at least one moving object area, and using another, second feed rate in the at least one static object area.

14. (Currently Amended) The CT unit as claimed in claim 13, ~~characterized in that~~wherein said means are implemented at

least partially by at least one of programs ~~or~~ and program modules.

15. (Currently Amended) The CT unit as claimed in ~~one of~~ claim~~s~~ 13~~ to 14~~, ~~characterized in that~~wherein an apparatus is provided for controlling the feed rate ~~(v_t)~~ as a function of scanning area.

16. (New) The method as claimed in claim 3, wherein the determination of static and moving object areas before the scan is performed by at least one optical recording, with subsequent manual subdivision of the areas.

17. (New) The method as claimed in claim 2, wherein the determination of moving and static object areas is performed during the scan, and a relatively low feed rate is selected upon detection of a cyclical movement, and a relatively higher feed rate is selected upon detection of a static state.

18. (New) The method as claimed in claim 1, wherein the detection of the cyclical movement of the subarea of the examination object is performed in the current scanning area by virtue of the fact that the intensity measurement of two oppositely directed rays is compared to two consecutive instants.

19. (New) The CT unit as claimed in claim 14, wherein an apparatus is provided for controlling the feed rate as a function of scanning area.